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IMAGES IN INTERVENTION

Spontaneous Right Coronary Artery Dissection

A Case of Spontaneous Resolution

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A 61-year-old woman with a history of smoking and polymyalgia rheumatica presented with an acute inferior ST-segment elevation myocardial infarction. Emergent coronary angiography was significant for a type D dissection of the right coronary artery (RCA) (Fig. 1). After multiple attempts to wire the true RCA lumen failed, the patient was placed on intra-aortic balloon pump (IABP) support and monitored in the intensive care unit. Her symptoms subsided post-procedure and ST-elevations resolved on electrocardiogram. The IABP was removed the next day. A transthoracic echocardiogram (TTE) showed a normal ejection fraction and localized hypokinesis of the basal inferior wall. She was discharged on dual antiplatelet therapy and remained stable until symptom recurrence 6 months later. Repeat angiography now revealed resolution of the RCA dissection noted earlier (Fig. 2). Repeat TTE was unremarkable. She responded to maximal medical therapy and remained asymptomatic after discharge.

Spontaneous coronary artery dissection is rare and can masquerade as acute coronary syndrome, ventricular arrhythmia, or sudden cardiac death. It commonly affects young peripartum women and is associated with atherosclerosis, connective tissue disorders, and vasculitis. The optimal treatment strategy remains unclear. Percutaneous coronary intervention may be unsuccessful in 35% of cases (1). Alternatively, a conservative approach in stable, asymptomatic patients has demonstrated a benign course and may even result in spontaneous resolution (1,2).

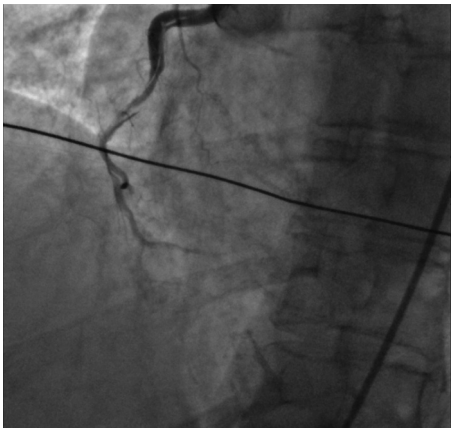

Figure 1. Right Coronary Artery Dissection

Left anterior oblique view showing occlusive, spiral dissection (type D).

Figure 2. Resolution of Dissection

Left anterior oblique view demonstrating resolution of the right coronary artery dissection noted earlier.

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Key Words: acute myocardial infarction ■ coronary artery dissection ■ spontaneous resolution.